GPS technology in animal agriculture Digital Agriculture

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Technology for animal agriculture

- Walk Over Weigh (WOW) scales
- Drones
- Infrared technology
- Accelerometers
- Cameras
- Temperature and heart rate sensors
- RFID
- Automatic and robotic milking systems
- Apps

- Livestock tracking – GPS technology



Importance of technology in agriculture





Increase in producers wanting to use technology to make better informed (and timely) decisions

The importance of technology in animal agriculture

Grazed forage



With technology, no additional forage will be needed in 2050

The University of Sydney

GPS technology applications - Livestock behaviour



- Social interactions
- Offspring Cow
- Grazing, resting etc.

GPS technology applications - Environment interactions



- Water
- Shelter
- Elevation

GPS technology applications - Pasture quality & biomass



GPS technology applications - Management strategies





 Pasture and paddock utilisation differences (native vs. improved paddocks)

- Stocking rate paddock utilisation differences
- Paddock boundary

GPS technology applications

- Animal welfare



Circling behaviour ('centripetal formation')

Sheep predation/ Dog attack



Conclusions

- Endless applications of GPS technology
 - Animal (behaviour, health, breed, species, age)
 - Pasture (quality, biomass, species, paddock)
 - Environment (climate, rainfall, elevation, soil)
 - Management (different stocking rates, paddocks)
- Increased collaboration needed





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